

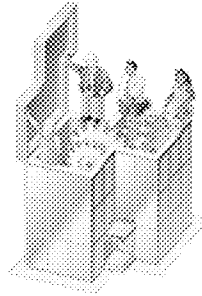
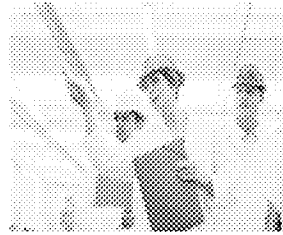


April 7, 2010

## **LABORATORY SAFETY COORDINATORS**

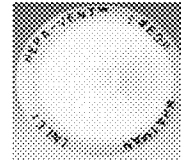
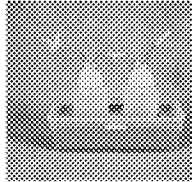
## LABORATORY ASSESSMENT POINTS

- ✖ Equipment
- ✖ Chemical Storage
- ✖ BSL-1 and BSL-2 Hazards
- ✖ Training



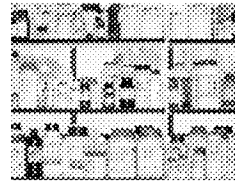
## ASSESSING EQUIPMENT

- ✖ We check for numbers, testing dates, inventory, electrical safety
- ✖ We check for maintenance records
- ✖ We check for compliance (autoclaves)
- ✖ BSC's will be tested for free in May
- ✖ New checklist item: Vacuum protection



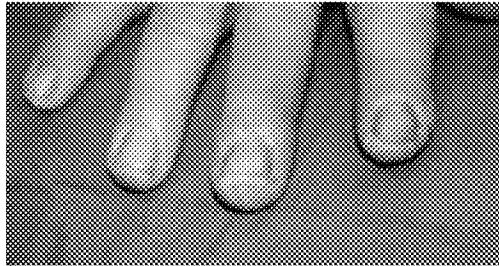
## CHEMICAL STORAGE

- × HUGE area for improvement campus-wide
- × Chemicals need to be stored properly
- × Many chemicals need to be segregated from one another
- × BIG Challenge for many laboratories
- × Do not exceed storage space
- × Maintain containers in good condition
- × Barcodes!!!!
- × No chemicals on floor



## HYDROFLUORIC ACID (HF)

- ✖ Take a Fact Sheet if you have this
- ✖ Must use in hood – no other chemicals!
- ✖ Very hazardous, burns skin, dissolves bones
- ✖ EHS supplies Calcium gluconate for 1<sup>st</sup> aid kits



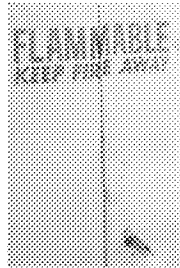
## PERCHLORIC ACID

- ✖ Destructive to human tissue
- ✖ Highly reactive
- ✖ Strong oxidizer when heated
- ✖ Needs dedicated fume hood



## FLAMMABLE LIQUIDS

- ✖ Are stored in flammable cabinets or refrigerators (including acetic acid)
- ✖ Some flammables will need to be segregated from one another:
- ✖ Oxidizers are not stored with flammables



## ACIDS AND BASES

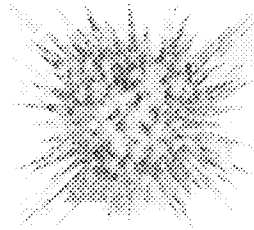
- ✖ Acids are separated from Bases (alkalis)
- ✖ Store chemicals below eye level
- ✖ Oxidizers (nitric acid) are separated from organics (acetic acid, formic acid)
- ✖ Oxidizers are not stored with flammables





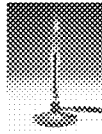
## PEROXIDE FORMERS

- ✖ Peroxide formers (ether, tetrahydrofuran, etc.) are dated and used within 6 months of opening; test for peroxides (EH&S has strips)
- ✖ Do not transfer out of original container until needed for imminent use,
- ✖ May form explosive compounds

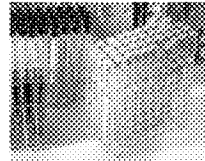
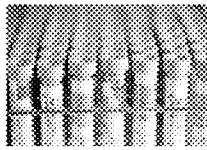


## CHEMICAL STORAGE CONTINUED

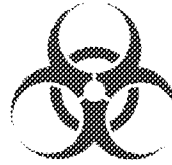
- ✖ Keep storage areas free of ignition sources



- ✖ Storage of vials and tubes must be neat and orderly



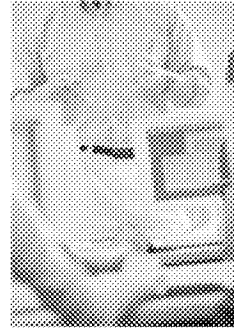
## BIOHAZARDS



- ✖ Do not overfill containers
- ✖ Use appropriate disinfectant
- ✖ Biohazard equipment needs biohazard stickers
- ✖ Centrifuge safety caps must be in use in BSL-2 labs (good lab practice in BSL-1)
- ✖ Aerosol producing equipment: vortex mixers, pipettes, blenders, homogenizers, etc. should be used in a biosafety cabinet for BSL-2 work

## SAFETY TRAINING

- ✖ Lab Safety Training (Yung Morgan) 1<sup>st</sup> time lab users
- ✖ Biological safety Training (Judy LaDuc) Annually
- ✖ Radiation Safety Training (Haneef Sahabdeen or Vince Chase)
- ✖ What's coming up?
- ✖ Autoclave safety module for OWL
- ✖ Biosafety on OWL



## SPILLS

- ✖ Small spills: clean up immediately
- ✖ Large or hazardous material spills:
  - ✖ Seal off area, post “Do Not Enter” signs
  - ✖ Contact EH&S 545-2682
  - ✖ Call 911, UMPD or Fire Department if after hours and this is a large hazardous spill



## THANK YOU COORDINATORS!!!!

- ✖ This is the last meeting for the year
- ✖ There will be a BBQ in June for you
- ✖ Be sure to sign in and leave an email address for us to send time and date!

